#### REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-26 and 28-60 will be pending. By this amendment, claim 27 has been canceled; claims 1, 26, 33, 54, 58, and 59 have been amended; claim 60 has been added. No new matter has been added.

### §112 Rejection of Claims 26-28, 54, and 55

On page 2 of the Office Action, claims 26-28, 54, and 55 stand rejected under 35 U.S.C. §112, second paragraph. Claims 26 and 54 have been amended; and claim 27 has been canceled to address the rejection.

Accordingly, it is submitted that the rejection of claims 26-28, 54, and 55 based upon 35 U.S.C. §112 has been obviated and withdrawal thereof is respectfully requested.

# § 103 Rejection of Claims 1-14, 20, 21, 25, 30-43, 48, 49, 53, and 57-59

On page 3 of the Office Action, claims 1-14, 20, 21, 25, 30-43, 48, 49, 53, and 57-59 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Logan *et al.* (U.S. Patent 6,088,455; hereinafter referred to as "Logan") in view of Bolle *et al.* (U.S. Patent 6,675,174; hereinafter referred to as "Bolle"). Claims 1, 33, 58, and 59 have been amended to address the rejection.

In the Background section of the Specification, it was stated that "[w]ith the arrival of digital recording techniques available at low cost in consumer electronics, it is now relatively simple to form personal music compilations on a storage medium such as a DVD (digital

versatile disk), recordable CD (compact disc), mini disk, hard disk, etc. The compilation is usually constructed from various 15 sources such as DVD and CD players connected to a PC type computer, music servers and radios, etc. ... Typically, a person wishing to make a compilation would select favourite musical titles from these sources and combine them manually to form a chosen sequence of titles on a recordable medium which can then be exploited outside the computer system, for instance with MPEG 3 players or in uncompressed form. Creating such compilations is time consuming, and the choice titles are normally limited by the sources available at the time of compilation, which usually amount to a personal or loaned collection of recordings and/or titles currently broadcast on the received radio stations. Even with the advent of music servers on the Internet such as "Napster" and "Gnutella" offering a myriad of music titles for downloading, it is not practical to browse through their plethoric lists arranged in alphabetical order. On the other hand, the search engines provided on these servers are only useful if the user knows exactly what to look for. ... Thus, all these approaches are not amenable to inciting a user to explore styles of music titles outside his or her pre-established tastes, and thus tends to confine musical cultures." *Background of the Specification, page 1, lines 11-31*.

To address the above-described problems of the conventional digital recording techniques, embodiments of the present invention propose "a tool which can automatically bring to disposal a large choice of titles from a centralised source generating sequences which can be later accessed to produce compilations. The sequences generated from such a centralised source, for instance a radio station, can be assumed to reflect a certain amount of artistic intelligence or ordering, so that the user can browse sequentially through the stored music titles in the order in which they were entered, and thus benefit from an initial sorting made upstream, e.g. at the level of the radio station." *Specification, page x, lines xx*.

For example, claim 1, as presented herein, is directed to an apparatus for establishing and outputting a succession of information items in which an artistic or rational link is reflected in

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said succession of information items, and includes:

"input means for receiving a sequence of information comprising a stream of information items in which an initial artistic or rational link is considered to exist between at least some pairs of adjacent items;

segmentation means for recovering information items from said stream of information items in response to segmentation data indicating end limits of said information items;

means for storing said recovered information items;

means for indexing said recovered information items with distance information indicative of relative separation between information items in the information stream; and

means for analyzing said distance information to select an information item to be entered into said succession to be established on the basis of an earlier information item in said succession and a separation between said earlier item and the selected item of information."

(emphasis added)

Thus, the apparatus of claim 1 is directed to indexing the recovered information items with distance information indicative of relative separation between information items in the information stream; and analyzing the distance information to select an information item to be entered into the succession to be established on the basis of an earlier information item in said succession and a separation between said earlier item and the selected item of information.

In the example of streaming music titles from a radio station, means for indexing and means for analyzing of claim 1 make use of the fact that the choice of successive music titles is not purely random, but reflects a rational or artistic link identified by the station's playlist compiler. Accordingly, the apparatus of claim 1 not only indexes the recovered information items with distance information indicative of relative separation between information items in the information stream but also analyzes the distance information to select an information item to be entered into the succession to be established on the basis of an earlier information item in said

succession and a separation between said earlier item and the selected item of information. See Specification page 12, line 4 to page 13, line 35.

Other dependent claims (e.g., claims 26-28) describe how the distance information is exploited in a practical way, for example, by providing a "discovery" cursor and enabling the user to explore new areas of music without departing radically or randomly from his or her preestablished tastes. See *Specification*, page 14, line 20 to page 15, line 21.

By contrast, Logan merely recited extracting individual music titles from an audio stream without considering any possible ordering of the successive music titles in the broadcast signal. That is, the broadcast signal is considered as nothing more than raw material for extracting individual music titles. The only information exploited in the broadcast signal is the data contents making up each individualized music file.

In Bolle, the segments are compared in the similarity search algorithm 180 to compute the similarity relations rather than using the similarity relations inherent in the sequence of information by "tagging said each segment in the order in which said each segment was segmented from said sequence of information, said position identifying means operating to tag said each segment with relative position information, wherein said relative position information provides similarity relations between the segments".

Therefore, it is maintained that Logan and Bolle, individually or in combination fail to teach or suggest all the limitations of claim 1.

Based on the foregoing discussion, claim 1 should be allowable over Logan and Bolle. Further, since independent claims 33, 58, and 59 closely parallel, and recite substantially similar limitations as recited in, claim 1, claims 33, 58, and 59 should also be allowable over Logan and Bolle. Since claims 2-14, 20, 21, 25, 30-32, 34-43, 48, 49, 53, and 57 depend from one of claims

1 and 33, claims 2-14, 20, 21, 25, 30-32, 34-43, 48, 49, 53, and 57 should also be allowable over Logan and Bolle.

Accordingly, it is submitted that the rejection of claims 1-14, 20, 21, 25, 30-43, 48, 49, 53, and 57-59 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

# § 103 Rejection of Claims 15-19, 22, 24, 44-47, 50, and 52

On page 10 of the Office Action, claims 15-19, 22, 24, 44-47, 50, and 52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Logan in view of Bolle, and further in view of Kraft *et al.* (U.S. Patent 6,225,546; hereinafter referred to as "Kraft").

Based on the foregoing discussion regarding claims 1 and 33, and since claims 15-19, 22, 24, 44-47, 50, and 52 depend from one of claims 1 and 33, claims 15-19, 22, 24, 44-47, 50, and 52 should also be allowable over Logan and Bolle. Further, since Kraft was merely cited for disclosing producing "a similarity relation graph expressing a distance D between that information item and other stored information items", it is submitted that Logan, Bolle, and Kraft, individually or in combination, fail to teach or suggest all the limitations of claims 15-19, 22, 24, 44-47, 50, and 52.

Accordingly, it is submitted that the rejection of claims 15-19, 22, 24, 44-47, 50, and 52 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

### § 103 Rejection of Claims 29 and 56

On page 15 of the Office Action, claims 29 and 56 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Logan in view of Bolle, and further in view of Kim *et al.* (U.S. Patent 6,083,009; hereinafter referred to as "Kim").

Based on the foregoing discussion regarding claims 1 and 33, and since claims 29 and 56 depend from claims 1 and 33, respectively, claims 29 and 56 should also be allowable over Logan and Bolle. Further, since Kim was merely cited for disclosing "means for labeling and storing said created sequences as objects which can be selectively exploited outside said apparatus", it is submitted that Logan, Bolle, and Kim, individually or in combination, fail to teach or suggest all the limitations of claims 29 and 56.

Accordingly, it is submitted that the rejection of claims 29 and 56 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

#### Newly-added Claim 60

Newly-added claim 60 closely parallels, and recites substantially similar but narrower limitations as recited in, claim 1. Therefore, claim 60 should be allowable over the cited prior art references.

## Conclusion

In view of the foregoing, entry of this amendment, and the allowance of this application with claims 1-26 and 28-60 are respectfully solicited.

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In regard to the claims amended herein and throughout the prosecution of this

application, it is submitted that these claims, as originally presented, are patentably distinct over

the prior art of record, and that these claims were in full compliance with the requirements of 35

U.S.C. §112. Changes that have been made to these claims were not made for the purpose of

patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes

were made simply for clarification and to round out the scope of protection to which Applicant is

entitled.

In the event that additional cooperation in this case may be helpful to complete its

prosecution, the Examiner is cordially invited to contact Applicant's representative at the

telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any

overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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